CLAIMS

1. An organic semiconductor light-emitting device being an organic EL device having a first electrode, a second electrode, and an emission layer provided between the first and second electrodes, comprising:

an organic semiconductor layer provided between the first electrode and the emission layer, having an absorption band within an emission wavelength band of the emission layer; and

a control electrode electrically coupled to the organic semiconductor layer.

2. The organic semiconductor light-emitting device according to claim 1, wherein the organic semiconductor layer includes a light absorption layer having the absorption band, and the control electrode contacts the light absorption layer.

3. The organic semiconductor light-emitting device according to claim 1, wherein the organic semiconductor layer includes a light absorption layer having the absorption band, and the control electrode is buried in the light absorption layer.

4. The organic semiconductor light-emitting device according to claim 2, wherein the light absorption layer is formed between the control electrode and the first electrode.

5. The organic semiconductor light-emitting device according to claim 1, wherein at least one of the emission layer and the organic semiconductor layer is doped with a dopant so that a light absorption coefficient of the organic

semiconductor layer is within a predetermined range.

6. The organic semiconductor light-emitting device according to claim 1, wherein current versus voltage characteristics between the first and second electrodes as a function of an applied voltage to the control electrode has thyristor characteristics in which the current versus voltage characteristics varies depending on whether the emission layer emits or not.

7. The organic semiconductor light-emitting device according to claim 1, further comprising a hole transport layer provided between the first electrode and the emission layer wherein the first electrode and the second electrode are an anode and a cathode, respectively.

8. The organic semiconductor light-emitting device according to claim 1, further comprising an electron transport layer provided between the second electrode and the emission layer wherein the first electrode and the second electrode are an anode and a cathode, respectively.